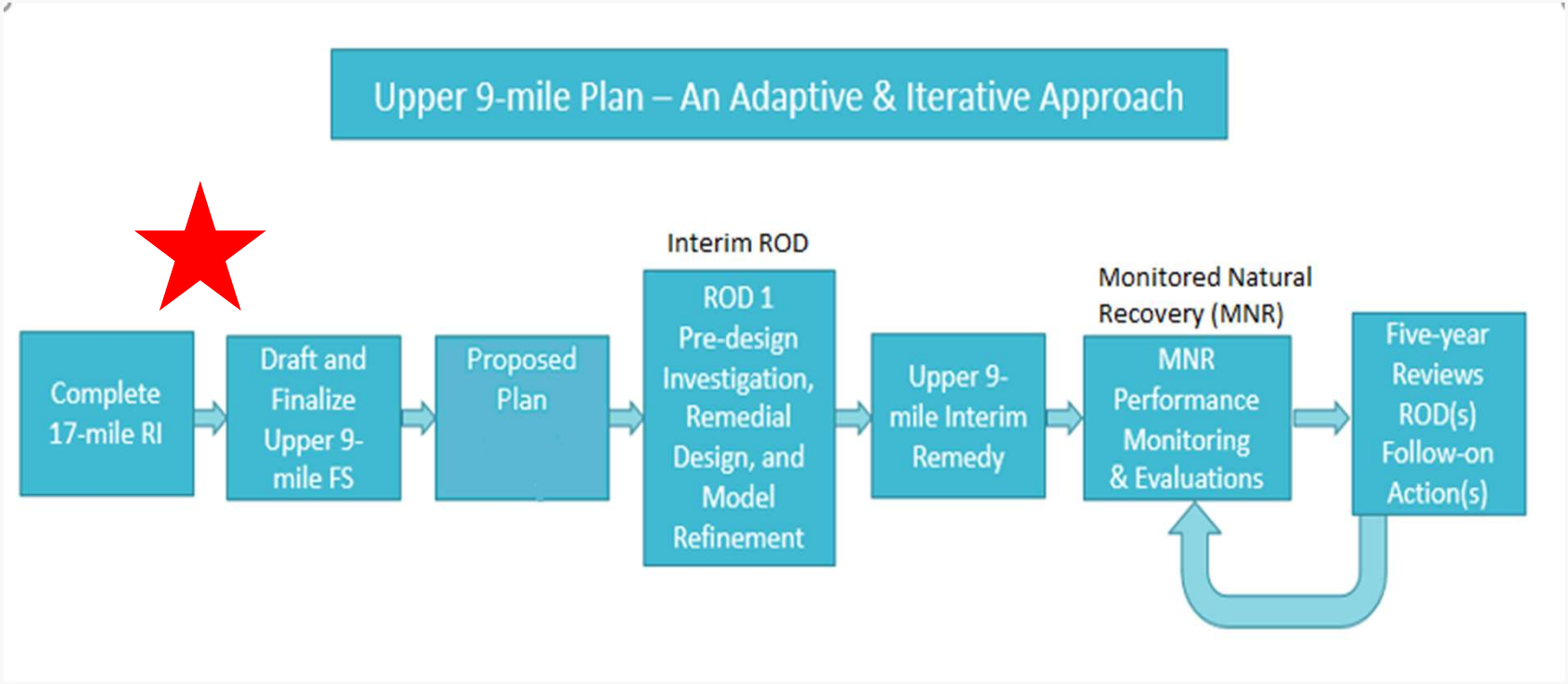
Region 2 serving the people of New Jersey,
New York, Puerto Rico and the U.S. Virgin Islands

Community Advisory Group Meeting
May 10, 2018

5/11/2018

623316

CPG's Proposal



Contaminated Sediments Technical Advisory Group (CSTAG)

- Region 2 asked CSTAG:
  - Do we have enough information for an Interim Action?
  - How do we structure the Interim Action?
  - Other directions
- CSTAG offered recommendations

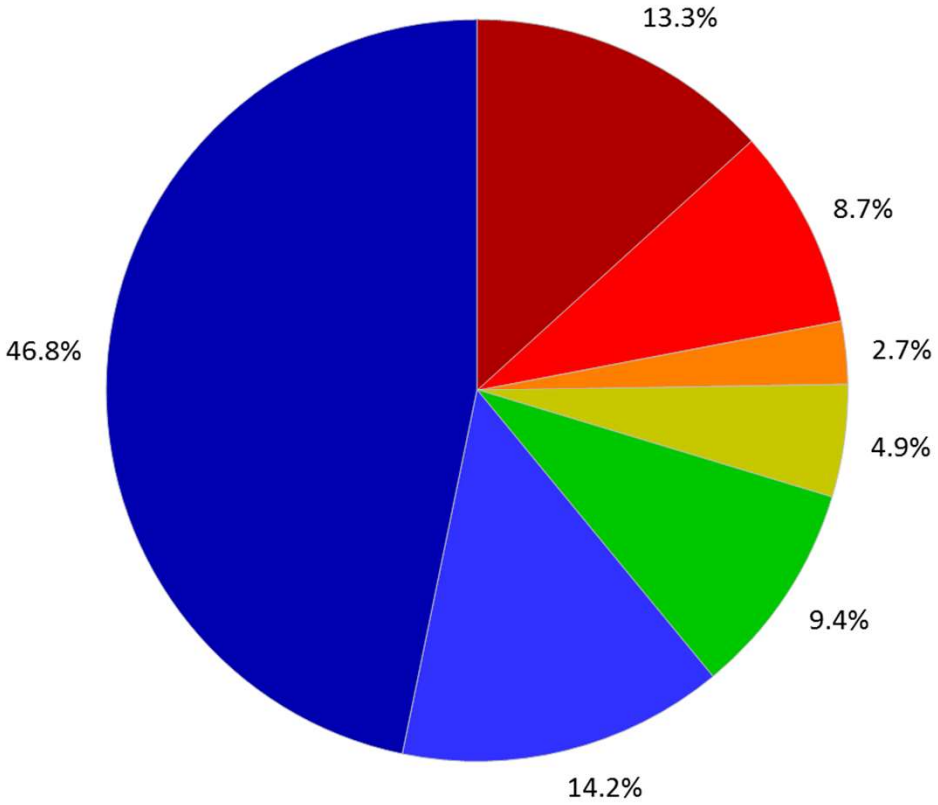
CSTAG Recommendation 1

Use of Interim Action

- **1a**
  - CSTAG supports the idea of an Interim Action to address source areas
- **1b**
  - EPA R2 ensures an Interim Action is consistent with future remedial actions
  - EPA R2 decision documents clearly communicate that an Interim Action ROD will be followed by a Final ROD that will be protective of human health and the environment

Surface Weighted Average Concentration (SWAC)

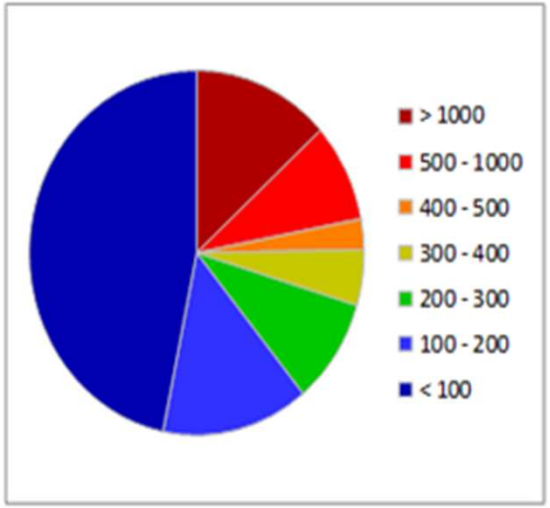
2,3,7,8-TCDD SWAC 994 ppt



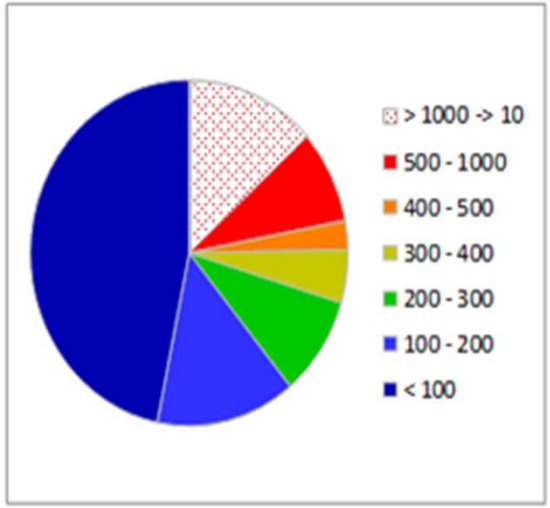
Conc Range (ppt)	Percent of Area	Average Conc (ppt)	Percent × Conc (ppt)
> 1000	13.3%	6367	845
500 - 1000	8.7%	716	62
400 - 500	2.7%	445	12
300 - 400	4.9%	348	17
200 - 300	9.4%	234	22
100 - 200	14.2%	143	20
< 100	46.8%	33	16
		SWAC = Sum =	994

SWAC for Different Remedial Action Levels

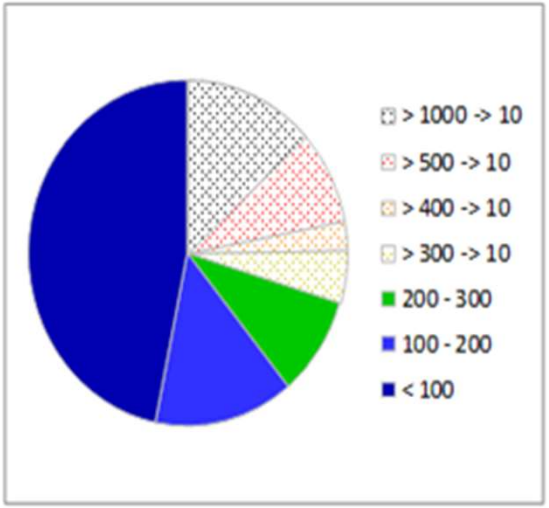
No Remedy
SWAC = 994 ppt
Area Remediated = 0.0%
Percent Reduction = 0%



RAL = 1000
SWAC = 151 ppt
Area Remediated = 13.3%
Percent Reduction = 85%

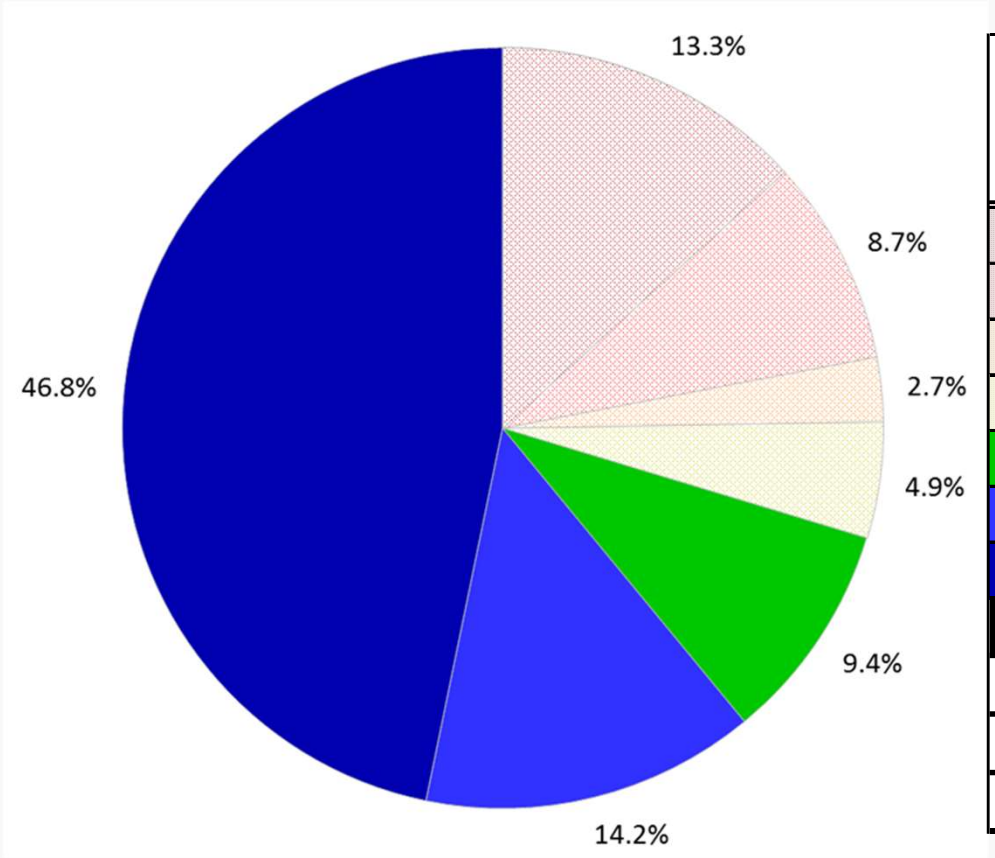


RAL = 300
SWAC = 61 ppt
Area Remediated = 29.7%
Percent Reduction = 94%



Remedial Action Level (RAL)

RAL = 300 ppt, SWAC = 61 ppt



	Conc Range (ppt)	Percent of Area	Average Conc (ppt)	Percent × Conc (ppt)
	> 1000	13.3%	10	1.3
	500 - 1000	8.7%	10	0.87
	400 - 500	2.7%	10	0.27
	300 - 400	4.9%	10	0.49
	200 - 300	9.4%	234	22
	100 - 200	14.2%	143	20
	< 100	46.8%	33	16
			SWAC = Sum =	61
			Percent of Area Remediated =	29.7%
			RAL =	300

CSTAG Recommendation 2

Remedial Goals and RALs

- **2a**
  - CSTAG supports use of exposure reduction, i.e. SWAC reduction, as a goal
- **2b**
  - Goal: Achieve a SWAC reduction
    1. To get there we are going to need a RAL
    2. Refine nature and extent of contamination with Pre-Design Investigation (PDI) data

CSTAG Recommendation 3

Alternative Development

- **3a**
  - More alternatives should be considered in the FS, include:
    - Range of percent SWAC reduction values and RALs
    - More technologies
- **3b**
  - Alternatives should include option of hydraulic dredging

CSTAG Recommendation 4

Use of SWAC

- **4a**
  - EPA should be clear about the areas and objectives associated with each SWAC goal
- **4b**
  - EPA should consider application of the SWAC across smaller exposure areas based on exposure areas

CSTAG Recommendation 5

Understand Remedy Performance

- **5**
  - Removal action at River Mile 10.9 mudflat
  - Dredged 2 feet of sediment and capped
  - Use conclusions and lessons learned at the RM10.9 removal for development of alternatives for interim remedy

CSTAG Recommendation 6

Adaptive Management

- **6a**
  - Robust data collection to evaluate remedy performance and monitor progress towards achieving the ultimate goal of protection of human health and the environment.
  - Use site-specific post-monitoring data for these efforts, rather than relying on modeled outcomes, to determine the need for any additional in-river work.
- **6b**
  - Effectiveness of the remedy: evaluate site-specific data to ultimate risk-based remediation goals, instead of comparing site-specific data to predicted model outputs

CSTAG Recommendation 7

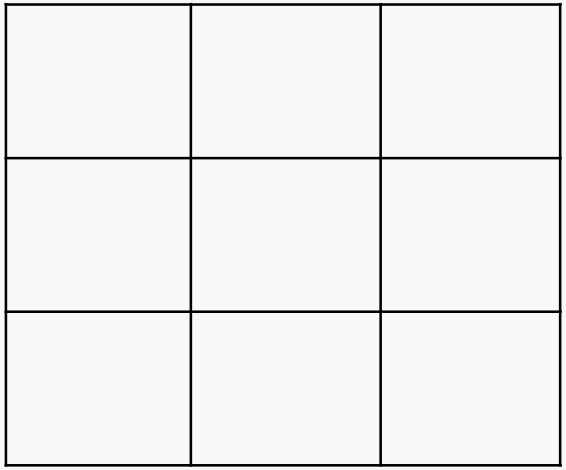
Baseline and Long-Term Monitoring

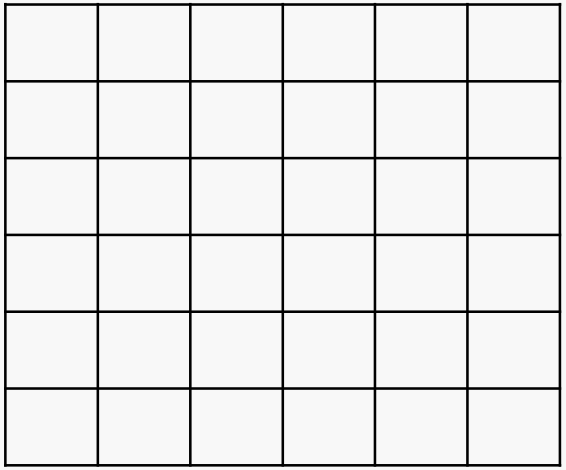
- **7a**
  - Need baseline data to track effectiveness of Interim Action:
    - annual sampling of biota and surface water for at least three years prior to beginning the remedial action
    - at least one sediment sampling event during that same period
- **7b**
  - Remove source and see how river responds
  - Monitor to see if river responds
  - After 10 years, evaluate river, is remedy functioning?
  - Collect adequate post-remedy data, including sediment

CSTAG Recommendation 8

Numeric Modeling

- **8**
  - Refine models based on more data collected during the PDI





CSTAG Recommendation 9

Pre-Design Sampling

- **9a**
  - In areas where contamination is shallow, we should remove all of the contaminated sediment
- **9b**
  - Prioritize obtaining a bathymetric survey of the study area during the feasibility study

CSTAG Recommendation 10

Expediting Time to Remediation

- **10**
  - CSTAG recommends that the Region approach the PRPs about collecting additional data soon